New HIV Diagnoses

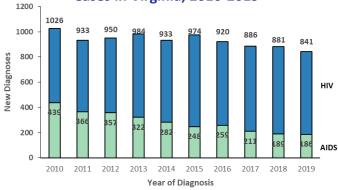
In 2019, there were 36,398 new HIV diagnoses in the United States (US). From 2015 to 2019, the number of new HIV diagnoses in the US decreased by 9%. This decline in new diagnoses suggests a true decrease in new infections, and can be attributed to increased HIV testing and targeted HIV prevention efforts in recent years. However, HIV diagnoses have increased among some subgroups.

Nationally, men who have sex with men (MSM) are the population most affected with HIV, accounting for 69% of all new diagnoses in 2019. Among MSM, new diagnoses increased among MSM aged 55 and older. New HIV diagnoses attributed to injection drug use (IDU) increased from 2015 to 2019, with most IDU-associated infections among White Americans (43%). The majority of all new HIV diagnoses in the US were among persons ages 20-34 (52%). Geographical differences in the burden of HIV also exist in the US; rates were the highest in the South at 15 per 100,000 and lowest in the Midwest with 7 per 100,000.

NEW HIV DIAGNOSES IN VIRGINIA

In 2019, Virginia ranked 13th in the number of annual reported new HIV diagnoses in the US and 18th highest in rate of HIV diagnosis.¹

Figure 1: Newly Diagnosed HIV and AIDS Cases in Virginia, 2010-2019



In the past 10 years from 2010 to 2019, new HIV diagnoses in Virginia decreased by about 18%. On average, about 933 new HIV/AIDS cases were

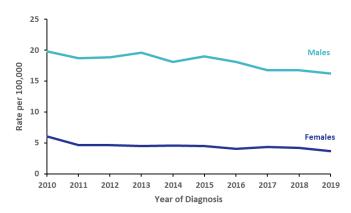
From 2010 to 2019, new HIV diagnoses in Virginia *decreased* by 18%.

diagnosed each year in Virginia, with an average of 647 HIV diagnoses and 286 AIDS diagnoses. From 2010 to 2019, the number of AIDS diagnoses declined from 439 cases in 2010 to a low of 186 in 2019 (Figure 1).

By Gender

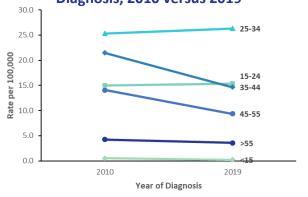
In 2019, approximately 81% of the newly

Figure 2: Newly Diagnosed HIV Cases by Gender, 2010-2019



diagnosed HIV cases in Virginia were among males. Rates of new diagnoses among males have declined from 2010 to 2019, from 20 per 100,000 population in 2010 to 16 per 100,000 in 2019. Rates of newly diagnosed cases among females declined from 6 per 100,000 in 2010 to 4 per 100,000 in 2019 (Figure 2). Males were over 4 times more likely to be diagnosed with HIV than females in 2019.

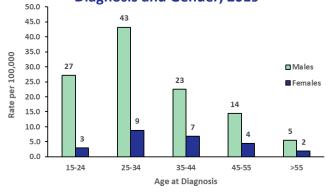
Figure 3: Newly Diagnosed HIV Cases by Age at Diagnosis, 2010 versus 2019



By Age at Diagnosis

The rate of new HIV diagnoses was highest among the 25-34 age group in 2019 at a rate of 26 per 100,000, a slight increase from 25 per 100,000 among those 25-34 in 2010. Rates among the 35-44 and 45-54 age groups have steadily declined over the past 10 years, from 22 and 14 per 100,000, respectively, in 2010 to 15 and 9 per 100,000, respectively, in 2019 (Figure 3). Rates of new HIV diagnoses among persons ages 55 and older and persons under 24 years showed little change across the 10-year time period.

Figure 4: Newly Diagnosed HIV Cases by Age at Diagnosis and Gender, 2019

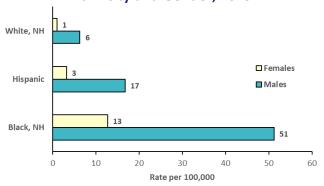


The highest rate of diagnosis in 2019 among males was the 25-34 age group (43 per 100,000), followed by the 15-24 age group (27 per 100,000) (Figure 4). Age at diagnosis for females was slightly older, with the highest rates of diagnosis for females among the 25-34 and 35-44 age groups (9 and 7 per 100,000, respectively). Males ages 25-34 were nearly 5 times more likely to be diagnosed with HIV than females of the same age.

By Race/Ethnicity

In 2019, 63% of the newly HIV diagnosed cases were Black, non-Hispanic (NH), followed by White, non-Hispanic (23%), and Hispanic/Latino (10%) persons. On average from 2010 to 2019, 59% of all new HIV diagnoses were among Black persons. In 2019, Black persons were nearly 9 times more likely to be diagnosed with HIV than their White counterparts, and 3 times more likely than Hispanics/Latinos. The lowest rate of diagnosis in 2019 was among the White population at 4 per 100,000.

Figure 5: Newly Diagnosed HIV Cases by Race/ Ethnicity and Gender, 2019

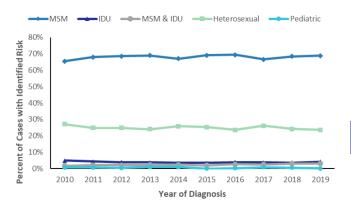


In 2019, Black females were over 12 times more likely to be diagnosed with HIV than their White counterparts, and Hispanic/Latino females were 3 times more likely to be diagnosed than White females (Figure 5). Among the male population in Virginia, Black males were 8 times more likely to be diagnosed than White males and 3 times more likely to be diagnosed than Hispanic/Latino males. Gender disparities existed among all three race/ethnicity groups, with males 4 to 6 times more likely to be diagnosed than females across the three groups.

By Transmission Risk

HIV risk transmission was estimated using a multiple imputation (MI) procedure provided by CDC which probabilistically assigned those who did not report or identify a specific risk and estimated a potential risk factor for transmission. Between 2010-2019, an average of 24% of reported HIV cases had no reported transmission risk. These cases were estimated using the MI procedure.

Figure 6: Newly Diagnosed HIV Cases by Transmission Risk, 2010-2019



From 2010 to 2019, the percent of newly diagnosed cases attributed to male-to-male sexual contact (MSM) increased from 65% to 69% (Figure 6). Heterosexual contact decreased slightly over the past 10 years, from 27% in 2010 to 24% in 2019. Injection drug use (IDU) remained relatively stable over the past 10 years, with 4% reporting IDU only and 2-3% reporting MSM and IDU.

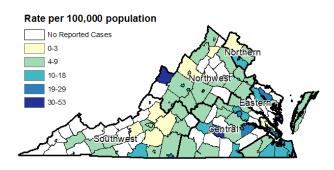
By Health Region

Virginia is divided into 5 health regions: Central, Eastern, Northern, Northwest, and Southwest. In 2019, the rate of diagnosis was the highest in the Eastern and Centrals regions at 16 and 13 per 100,000 population, respectively. The lowest diagnosis rates occurred in the Southwest and Northwest health regions (about 4 and 5 per 100,000, respectively.

As evidenced from Figure 7, counties with highest rates of persons newly diagnosed with HIV in 2019 are located primarily in the Eastern, Northern, and Central Regions, where highest rates approached

53 cases per 100,000 population. Lower rates occurred primarily in the Northwest and Southwest Regions, where rates by county averaged about 4.5 per 100,000.

Figure 7: Newly Diagnosed HIV Cases by City/County, 2019



REFERENCES

 Centers for Disease Control and Prevention. HIV Surveillance Report, 2019; vol. 32. http://www.cdc.gov/hiv/library/reports/hivsurveillance.html. Published May 2021. Accessed June 2021.